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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,397	08/02/2001	Pierre Legrain	EGYPSA-013	6024

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EXAMINER	
MOSHER, MARY	

ART UNIT	PAPER NUMBER
1648	

DATE MAILED: 06/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

2nd supplemental Notice of Allowability	Application No. 09/921,397	Applicant(s) LEGRAIN ET AL.	
	Examiner Mary E. Mosher, Ph.D.	Art Unit 1648	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☐ This communication is responsive to _____.

2. ☒ The allowed claim(s) is/are *1-5,12-16,20,21,24,27-30,44,45,47-50,62 and 74-85*.

3. ☒ The drawings filed on *02 August 2001* are accepted by the Examiner.

4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☒ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

Supplemental

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

In claim 76, another typographical error has been corrected. A complete copy of the claims is attached.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary E. Mosher, Ph.D. whose telephone number is 571-272-0906. The examiner can normally be reached on M-T and alternate F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on 571-272-0902. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

6/15/05

MARY E. MOSHER, PH.D.
PRIMARY EXAMINER

IN THE CLAIMS

1. (Previously presented) A nucleic acid which encodes a polypeptide consisting essentially of the amino acid sequence of SEQ ID NO: 20.

2. (Previously presented) A nucleic acid sequence, which encodes a polypeptide having at least 95% amino acid identity with a polypeptide having the amino acid sequence of SEQ ID N0:20 and retains the same binding affinity ~~to~~ as said polypeptide of SEQ ID N0:20.

3. (Previously presented) A nucleic acid according to claim 1, wherein said nucleic acid consists essentially of SEQ ID NO:58 or a sequence complementary thereto.

4. (Previously presented) A nucleic acid, having at least 95% nucleic acid identity with the nucleic acid of SEQ ID N0:58 or a sequence complementary thereto, and which encodes a polypeptide retaining the same binding affinity as the polypeptide of SEQ ID NO:20.

5. (Previously presented) A nucleic acid, encoding a polypeptide having an amino acid sequence consisting essentially of 40 consecutive amino acids of SEQ ID N0:20.

6-11. (Cancelled)

12. (Previously presented) A recombinant vector comprising a nucleic acid according to claim 1.

13. (Previously presented) A recombinant vector comprising a nucleic acid according to claim 2.

14. (Previously presented) A recombinant vector comprising a nucleic acid according to claim 3.

15. (Previously presented) A recombinant vector comprising a nucleic acid according to claim 4.

16. (Previously presented) A recombinant vector comprising a nucleic acid according to claim 5.

17-19. (cancelled)

20. (Previously presented) An isolated host cell transformed with a vector according to any one of claims 12 to 16.

21. (Previously presented) A set of two nucleic acids consisting essentially of:

(i) a first nucleic acid encoding a Selected Interacting Domain (SID®) polypeptide according to claim 1; and

(ii) a second nucleic acid encoding a prey polypeptide which binds to the SID® polypeptide defined in i).

22-23. (cancelled)

24. (Previously presented) A composition comprising a set of two nucleic acids, encoding polypeptides, consisting essentially of the set SEQ ID N0:132/SEQ ID N0:58.

25-26. (cancelled)

27. (Previously presented) A method for selecting a molecule which inhibits the binding between a set of two polypeptides wherein said method comprises:

a) cultivating a recombinant host cell containing a reporter gene the expression of which is toxic for said recombinant host cell, said recombinant host cell further comprising two vectors wherein:

i) the first vector contains a nucleic acid comprising a polynucleotide encoding a first hybrid polypeptide containing a first polypeptide encoded by a nucleic acid according to any one of claims 1 to 5, and a DNA binding domain;

ii) the second vector contains a nucleic acid comprising a polynucleotide encoding a second hybrid polypeptide containing a second polypeptide which binds with the first polypeptide, and an activating domain which activates said toxic reporter gene when the first and the second hybrid polypeptides are interacting;

wherein said cultivating is on a selective medium containing the molecule to be tested and that allows the growth of said recombinant host cell when the toxic reporter gene is not activated; and

b) selecting the molecule if it inhibits the growth of the recombinant host cell defined in a).

28. (Previously presented) A method for selecting a molecule which inhibits the binding between a set of two polypeptides wherein said method comprises:

a) cultivating a recombinant host cell containing a reporter gene the expression of which is toxic for said recombinant host cell, said recombinant host cell further comprising two vectors wherein:

i) the first vector contains a nucleic acid comprising a polynucleotide encoding a first hybrid polypeptide containing a first polypeptide encoded by SEQ ID NO: 132, and a DNA binding domain;

ii) the second vector contains a nucleic acid comprising a polynucleotide encoding a second hybrid polypeptide containing a second polypeptide encoded by SEQ ID NO: 58 and an activating domain which activates said toxic reporter gene when the first and the second hybrid polypeptides are interacting;

wherein said cultivating is on a selective medium containing the molecule to be tested and that allows the growth of said recombinant host cell when the toxic reporter gene is not activated; and

b) selecting the molecule if it inhibits the growth of the recombinant host cell defined in a).

29. (Previously presented) A method for selecting a molecule which inhibits protein-protein interaction of a set of two polypeptides wherein said method comprises:

a) cultivating a recombinant host cell containing a reporter gene the expression of which is toxic for said recombinant host cell, said recombinant host cell further comprising two vectors wherein:

i) the first vector contains a nucleic acid comprising a polynucleotide encoding a first hybrid polypeptide containing a first polypeptide encoded

by a nucleic acid according to any one of claims 1 to 5, and a first domain of an enzyme;

ii) the second vector contains a nucleic acid comprising a polynucleotide encoding a second hybrid polypeptide containing a second, polypeptide which binds with the first polypeptide and a second part of said enzyme which activates said toxic reporter gene when the first and the second hybrid polypeptides are interacting, said interaction recovering the catalytic activity of the enzyme;

wherein said cultivating is on a selective medium containing the molecule to be tested and that allows the growth of said recombinant host cell when the toxic reporter gene is not activated; and

b) selecting the molecule if it inhibits the growth of the recombinant host cell defined in a).

30. (Previously presented) A method for selecting a molecule which inhibits protein-protein interaction of a set of two polypeptides wherein said method comprises:

a) cultivating a recombinant host cell containing a reporter gene the expression of which is toxic for said recombinant host cell, said recombinant host cell further comprising two vectors wherein:

i) the first vector contains a nucleic acid comprising a polynucleotide encoding a first hybrid polypeptide containing a first polypeptide encoded by SEQ ID NO: 132, and a first domain of an enzyme;

ii) the second vector contains a nucleic acid comprising a polynucleotide encoding a second hybrid polypeptide containing a second polypeptide encoded by SEQ ID N0:58, and a second part of said enzyme which activates said toxic reporter gene when the first and the second hybrid polypeptides are interacting, said interaction recovering the catalytic activity of the enzyme;

wherein said cultivating is on a selective medium containing the molecule to be tested and that allows the growth of said recombinant host cell when the toxic gene is not activated; and

b) selecting the molecule if it inhibits the growth of the recombinant host cell defined in a).

31-43. (cancelled)

44. (Previously presented) A nucleic acid encoding a two-component marker compound, wherein the first component comprises a Selected Interacting Domain (SID®) polypeptide encoded by a nucleic acid according to any one of claims 1 to 5; and the second component comprises a detectable polypeptide which can non-covalently bind to said SID® polypeptide.

45. (Previously presented) A recombinant vector comprising a nucleic acid according to claim 44.

46. (cancelled)

47. (Previously presented) An isolated recombinant host cell which has been transformed with said recombinant vector according to claim 45.

48. (Previously presented) An isolated recombinant host cell according to claim 47 which is of prokaryotic origin.

49. (Previously presented) An isolated recombinant host cell according to claim 47 which is of eukaryotic origin.

50. (Previously presented) An isolated recombinant host cell according to claim 49 which is a mammalian host cell.

51-61. (cancelled)

62. (Previously presented) A composition comprising a polynucleotide encoding a Selected Interacting Domain (SID®) polypeptide according to any one of claims 1 to 5, and a carrier.

63-73. (cancelled)

74. (Previously presented) A nucleic acid which encodes a polypeptide variant of SEQ ID NO: 20 having from one to three equivalent amino acid substitutions.

75. (Previously presented) A nucleic acid which encodes a polypeptide consisting essentially of 40 consecutive amino acids of a variant of SEQ ID NO: 20, said variant having from one to three equivalent amino acid substitutions.

76. (Currently amended) A nucleic acid encoding a marker compound, wherein said marker compound comprises a detectable polypeptide covalently bound to a Selected Interacting Domain (SID®) polypeptide encoded by a nucleic acid according to ~~ee~~ any one of claims 1 to 5.

77. (Previously presented) The nucleic acid of claim 76, wherein the detectable polypeptide is fused to the SID® polypeptide.

78. (Previously presented) The nucleic acid of claim 77, wherein said detectable polypeptide is a fluorescent protein.

79. (Previously presented) The nucleic acid of claim 78, wherein said fluorescent protein is green fluorescent protein (GFP).

80. (Previously presented) The nucleic acid of claim 78, wherein said fluorescent protein is yellow fluorescent protein (YFP).

81. (Previously presented) The nucleic acid of claim 77, wherein said detectable polypeptide has catalytic activity.

82. (Previously presented) The nucleic acid of claim 81, wherein said detectable polypeptide is an enzyme or enzymatically active enzyme fragment.

83. (Previously presented) The nucleic acid of claim 82, wherein said enzyme is alkaline phosphatase.

84. (Previously presented) The nucleic acid of claim 82, wherein said enzyme is glutathione peroxydase.

85. (Previously presented) The nucleic acid of claim 82, wherein said enzyme is horse radish peroxydase.